Apple //c External Disk:

The disk port is a D8-19 connector with all the signals that are available on drive two of an Apple //e disk controller card. This disk will accessed as slot 6 drive 2.

| Pinout //c D8-19 | SIGNAL NAME | Pinout Apple //e (controller card) 20 pin header | |
|---|---|---|---|
| 1 | GND | 1 | |
| 2 | GND | 3 | |
| 3 | GND | 5 | |
| 4 | GND | 7 | |
| 5 | -12V | 9 | |
| 6 | +5V | 11 | |
| 7 | +12V | 13 | |
| 8 | +12V | 15 | |
| 9 | EXTINT* | | |
| 10 | WRPROT | 20 | |
| 11 | PHASE0 | 2 | |
| 12 | PHASE1 | 4 | |
| 13 | PHASE2 | 6 | |
| 14 | PHASE3 | 8 | |
| 15 | WRREQ | 10 | |
| 16 | nc | | |
| 17 | ENBL2 | 14 | |
| 18 | RDDATA | 16 | |
| 19 | WRDATA | 18 | |
| | nc | 17 | (+12V) |
| | nc | 19 | (+12V) |
| | nc | 12 | (+5V) |

The //c disk cannot be used from an Apple //e disk controller card with a simple ribbon cable (20-pin insulation displacement (i.d.) header to i.d. D8-19), since pins 9 and 16 of the DB-19 should not be connected and pin 19 should connect to pin 20 of the card.

The Apple //e drive can not be used on a //c unless the D8-19 pin 10 is connected to pin 20 of the disk and D8-19 pin 9 is not connected (disk pin 19 should also be left unconnected).

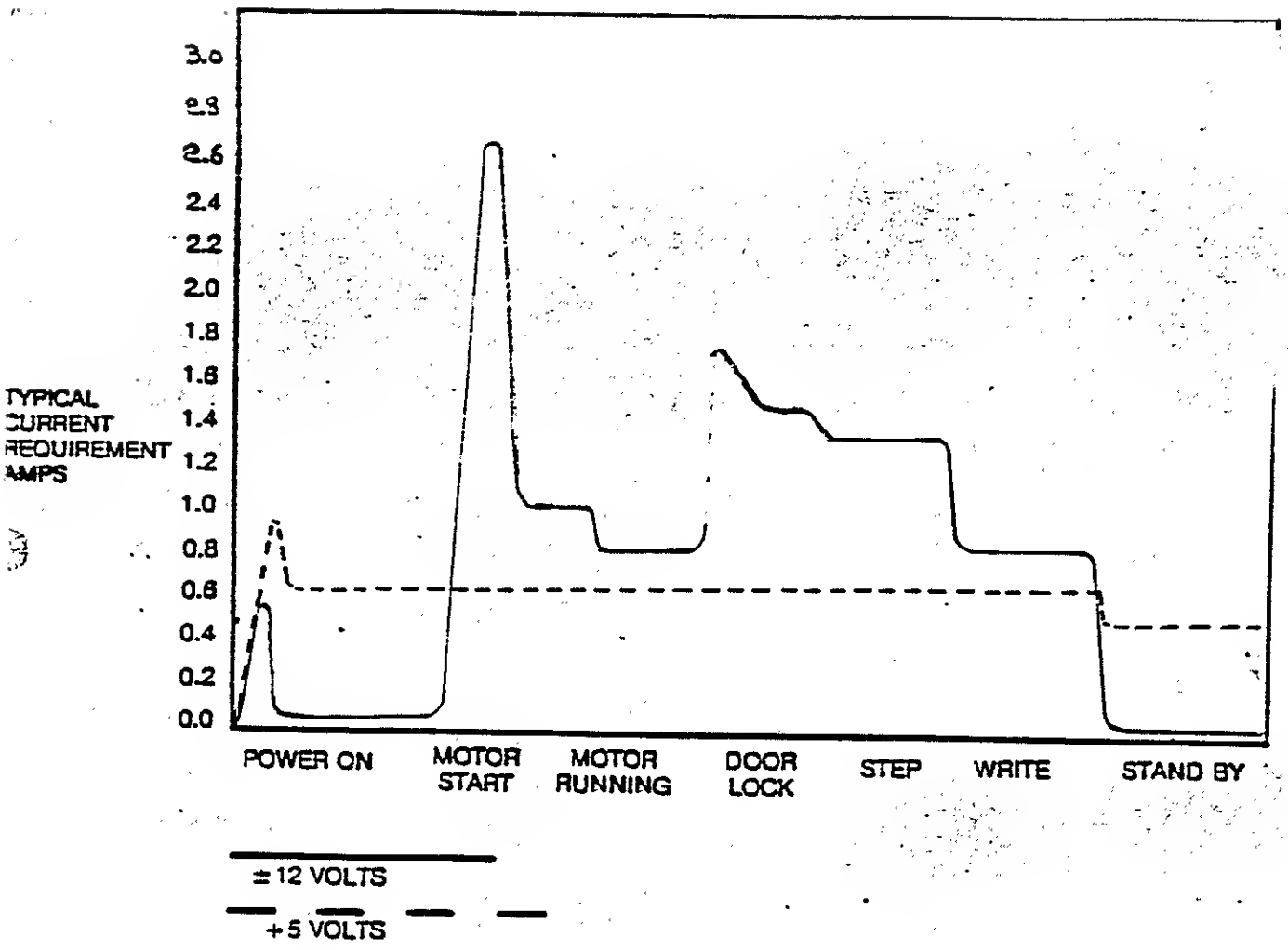
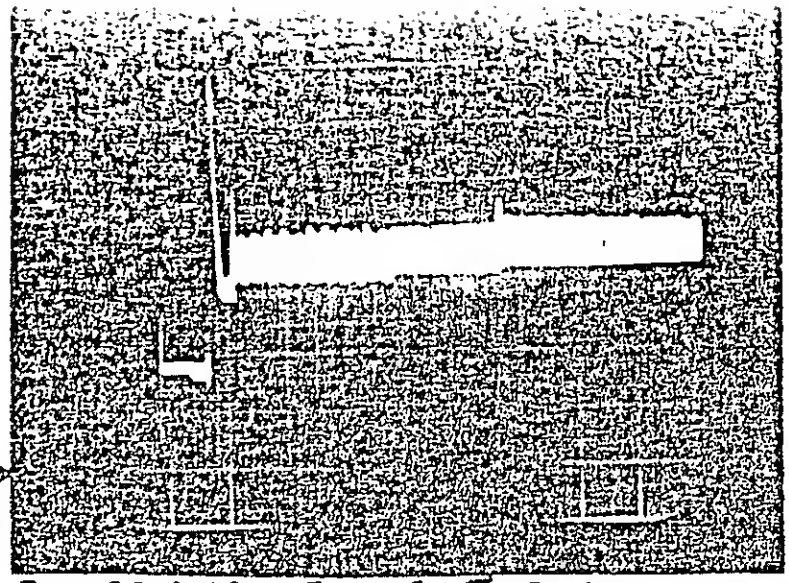
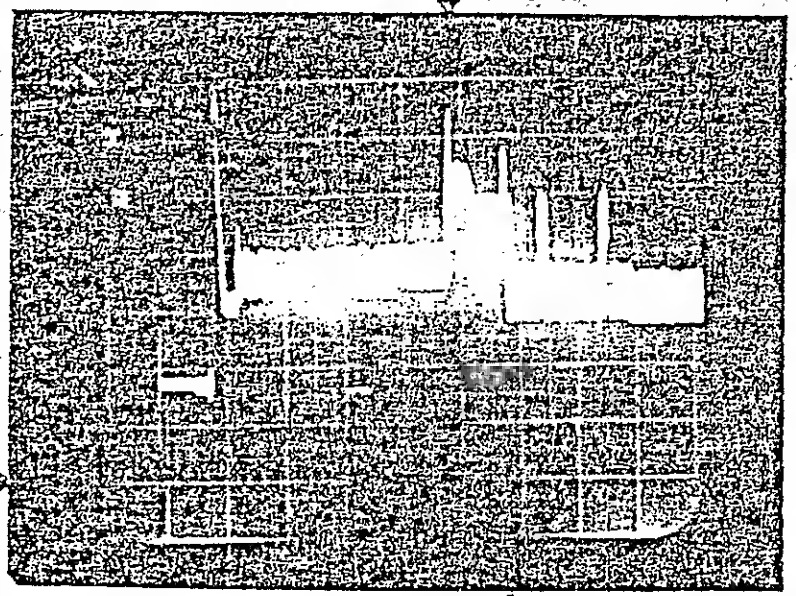


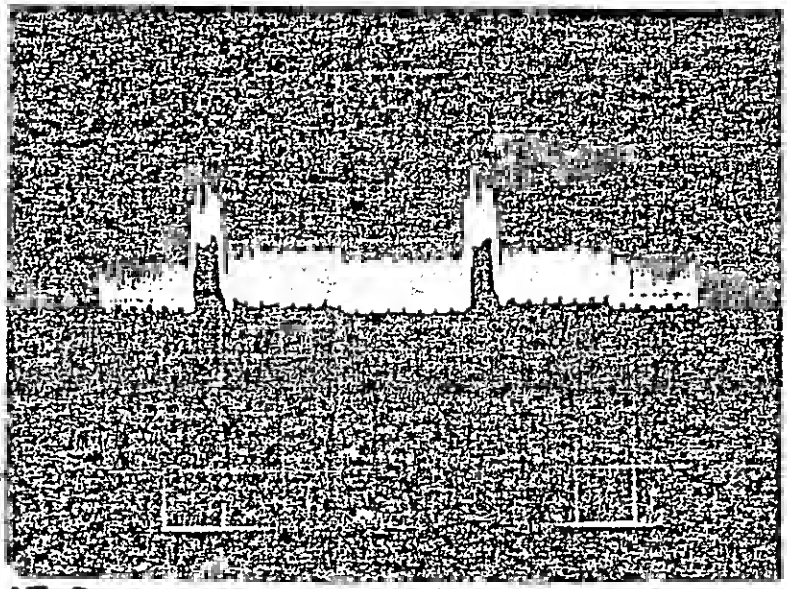

**TABLE 1.** DC POWER REQUIREMENTS



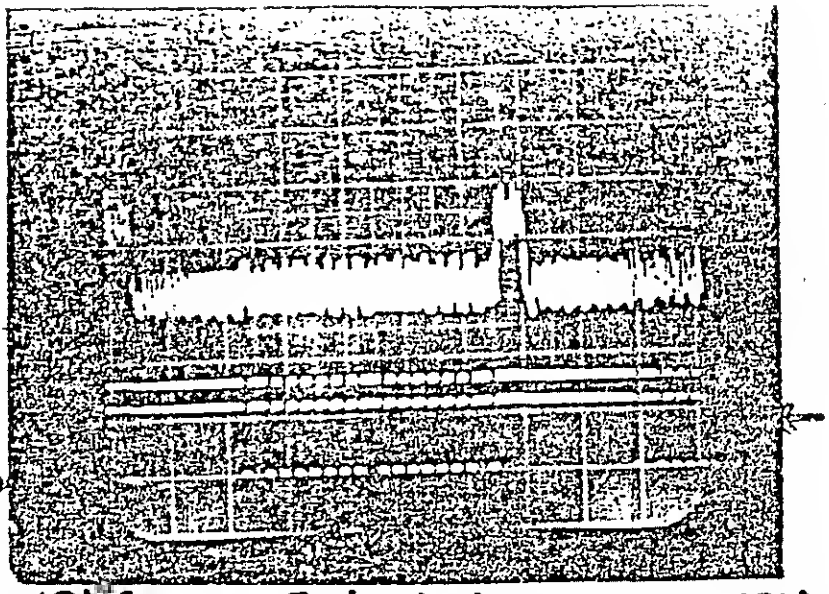

POWER ON/MOTOR START .5A/.5S/DIV 12V

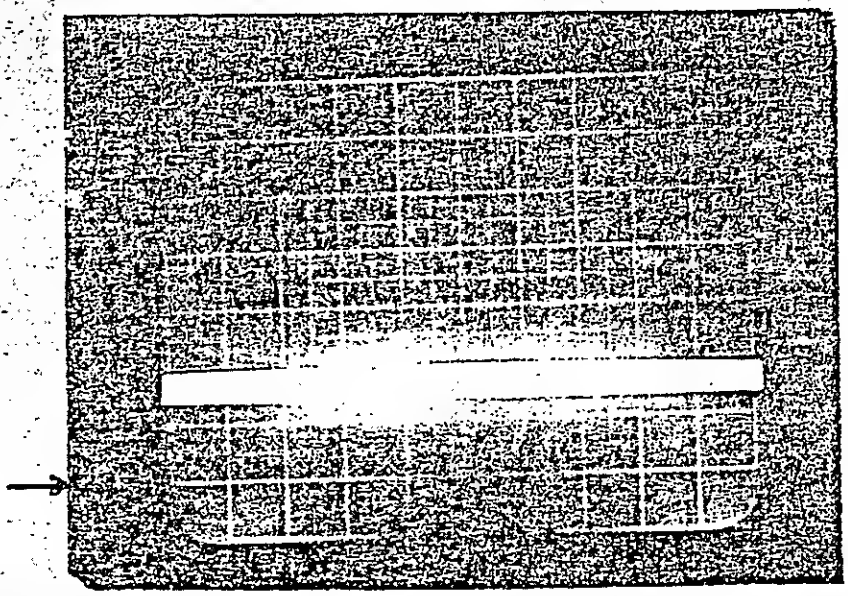


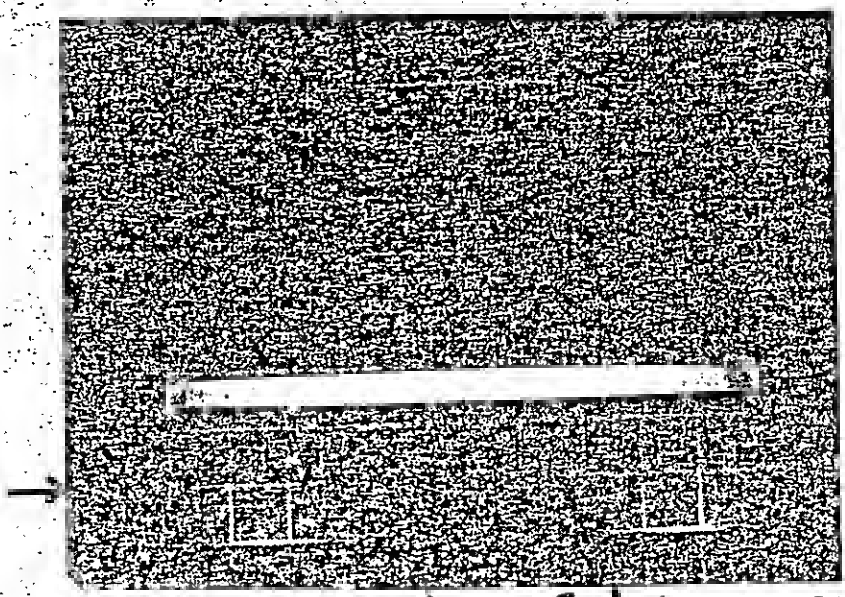
DOOR LOCK .5A/.5S/DIV 12V

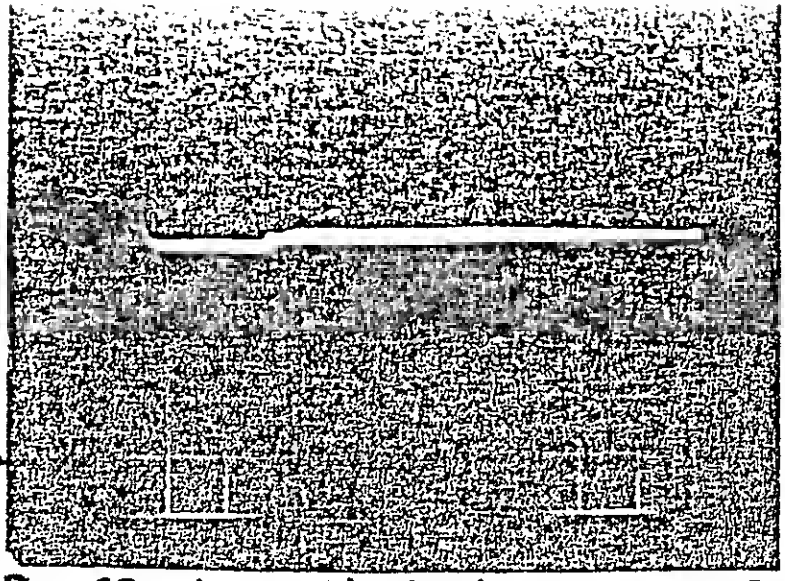


STEP .5A/.1S/DIV 12V

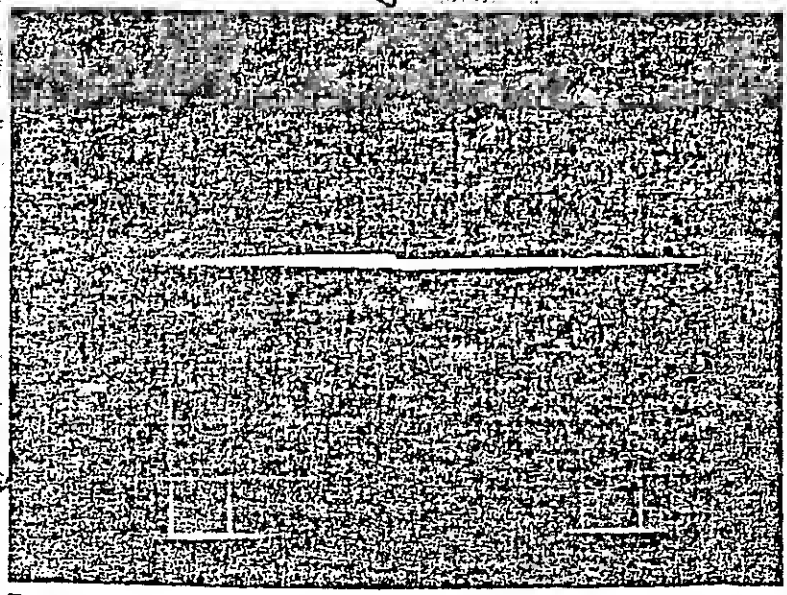

GND
WRITE .5A/.1SI DIV 12V


STANDBY .5A/DIV 12V

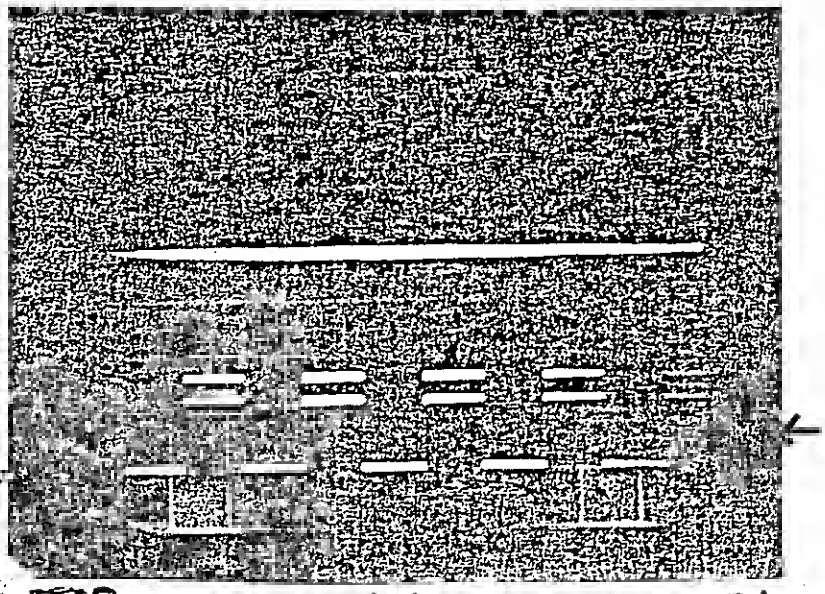

W/O DISK CONTROLLER .5A/DIV 12V



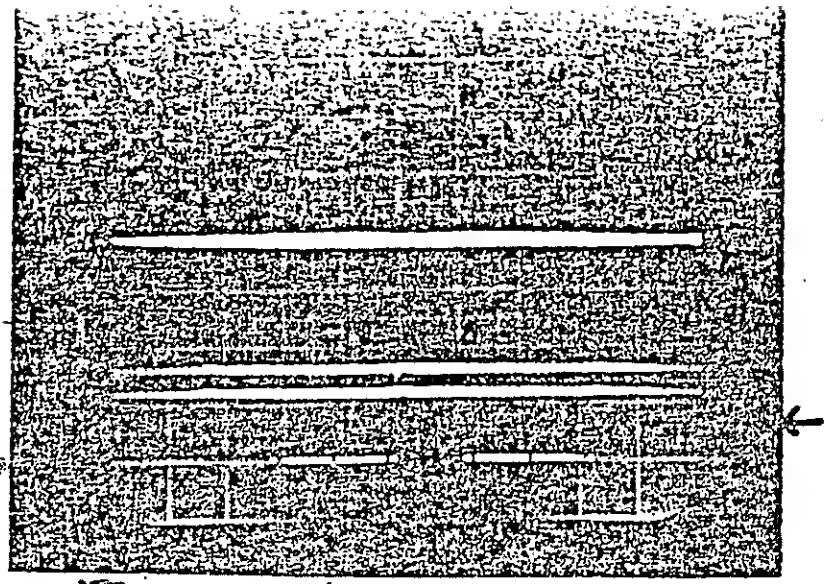
POWER ON 1A/.25/DIV 5V



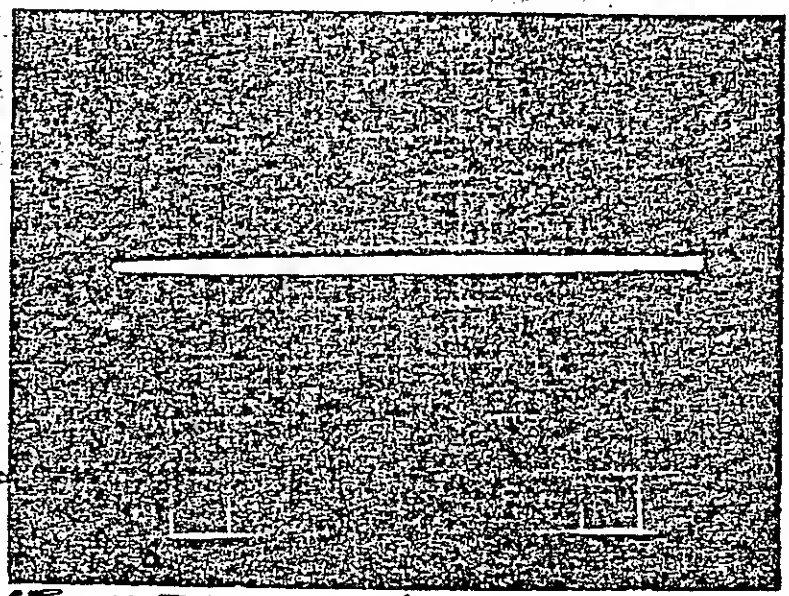
DOOR LOCK 1A/DIV 5V



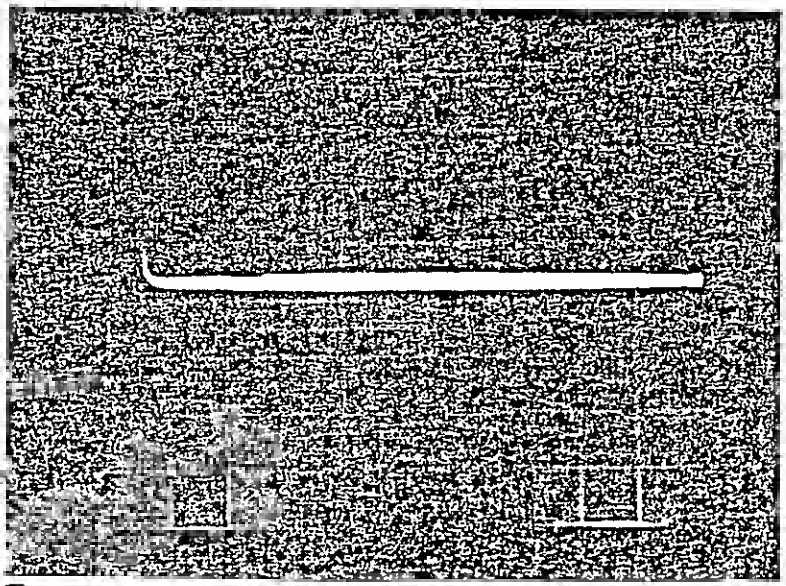
STEP 1A/DIV 5V



Write 1A/.25/DIV 5V



STANDBY 1A/DIV 5V



Power on W/o DISK DRIVE 1A/DIV 5V

# CIRCUIT SCHEMATIC: DISK II INTERFACE